

### Remarks

This case has been carefully considered in light of the Office Action dated June 6, 2005 wherein: claims 1-5, 22-26, 43 and 45-49 were rejected under 35 USC 103(a) over Zalewski et al (US Pat. No. 6,260,068).; claims 6-21, 27-33, 34-42, 44 and 50-65 were rejected under 35 USC 103(a) on Zalewski in view of Maeurer et al. (US Pat. No. 5,301,323). Reconsideration is respectfully requested.

Claims 1-65 remain pending in this case.

Claims 1, 22, 43 and 45 have been amended to recite “said managing comprising dynamically redistributing allocation of a shareable resource.....so as to effectuate achievement of workload goals, **comprising application program processing goals**, of said two or more partitions.” [emphasis added] This amendment clarifies that the term “workload goals” as recited in these claims refers to goals of application programs running on the system. Support for this amendment is found in the specification, for example, on page 12, lines 23-25. No new matter has been added.

Applicants respectfully traverse the rejection of claims 1-5, 22-26, 43 and 45-49, particularly as amended, under 35 USC 103(a) on Zalewski for the following reasons.

Zalewski et al. describe using software to subdivide a single physical machine into multiple partitions, each having the capability of running an individual operating system instance. Zalewski et al. describe a way for migrating resources from one partition to another. Specifically, Zalewski et al. describe a “push” model for resource migration. Zalewski’s “push” model involves an “owning” partition that controls the resources; the “owning” partition must release a resource before it can be migrated to another partition. This is done as follows in accordance with Zalewski’s “push” model: A first operating system requests a resource from a second instance. In response to the request, the second instance determines whether it can spare the resource. If so, it brings the resource to an idle state; and the resource is transferred when the second instance stops using it.

Paragraph 5 of the Office Action states: “Zalewski does not explicitly state that his migration is conducted for load-balancing purposes, however, Zalewski’s [sic] teachings clearly suggest that the dynamic resource sharing/migration is performed so as to effectuate achievement of the workload goals of the two or more partitions.”[emphasis added]

The applicants respectfully take issue with the characterization in the Office Action of Zalewski’s purpose for resource migration set forth in the Office Action and quoted above. Zalewski does not “clearly suggest that the dynamic resource sharing/migration is performed so as to effectuate achievement of the workload goals of the two or more partitions”. To the contrary, Zalewski clearly states in column 5, lines 46-50, that his purpose is **“to allow the concurrent execution of multiple instances of operating system software.”** [emphasis added] To this end, Zalewski provides that “[r]eassignment of resources can only be performed by the initialized partition to which the resource is currently assigned.” This is the above-described “push” model of resource migration in which an “owning” resource may release an assignable resource upon request.

In contrast to Zalewski who migrates resources in order to allow the concurrent execution of multiple instances of operating system software, the applicants recite in amended claims 1, 22, 43 and 45, and the claims dependent therefrom, “dynamically redistributing allocation of a shareable resource of at least one partition.....so as to effectuate achievement of workload goals, comprising application program processing goals, of said two or more partitions.” The applicants respectfully submit that the recited invention is not taught or suggested by Zalewski, who teaches assigning resources to specific “owning” partitions and, by using the “push” model” described above, allows the “owning” partition to release a resource for the purpose of allowing concurrent execution of multiple instances of operating system software.

Therefore, claims 1-5, 22-26, 43, and 45-49, particularly as amended, are believed to be patentable over Zalewski under 35 USC 103(a). Reconsideration and allowance of these amended claims are thus respectfully requested.

The applicants respectfully traverse the rejection of claims 6-21, 27-33, 34-42, 44, and 50-65 over Zalewski in view of Maeurer et al. under 35 USC 103(a) for the following reasons.

Maeurer et al. describe a data processing system using a channel path management program. Maeurer's channel path management program makes changes to the channel path configuration based on channel path utilization statistics.

The applicants respectfully submit that it is unclear from the Office Action how Maeurer's reconfiguration of a channel path based on utilization statistics can be compared with the applicants' dynamic distribution of shareable resources across partitions of a computing environment based on achievement of each partition's workload goals. In prior Office Actions, channel path was equated with partitions, and the applicants pointed out that this was not the case. (Maeurer gives a definition of channel path in column 1, lines 40-43, as "[t]he connections between the channel subsystem and the control units.") In the current Office Action, it appears that channel paths are not only being equated with partitions, but with the shareable resources as well. Specifically, in paragraph 6 of the Office Action, it is stated as follows:

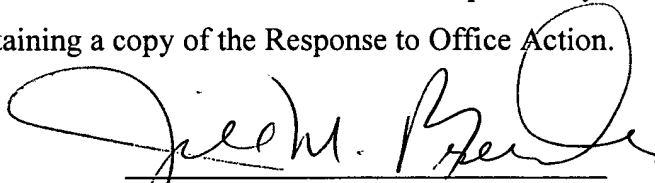
Maeurer teaches the **resource (channel)** 'PO is now shared by CU1 and CU4' p11 3-40, and from this it would have been obvious to provide assigning the shareable resource among two or more partitions based on percentage allocation as recited. It would have been obvious to combine Maeurer's teachings with Zalewski **because the dynamic reallocation/reconfiguration of a device with respect to channel/partitions provides a flexibility [sic] for assigning resources responsive to system load conditions.**

The applicants respectfully submit that it is unclear from the Office Action, in particular with respect to paragraph 6 set forth above, how Maeurer and Zalewski are being combined and how any such combination would render obvious the applicants' invention as claimed. In particular, as described hereinabove, Zalewski describes migrating resources in a multi-processor computer system in order to allow the concurrent execution of multiple instances of operating system software. On the other hand, Maeurer describes channel path reconfiguration in a data processing system. The applicants respectfully submit that these two references are totally different in purpose and structure and cannot be combined. The applicants further submit that there is no motivation in either reference for any proposed combination. Merely stating, as in paragraph 6 of the Office Action set forth above, that a combination would provide flexibility without any indication of how such a combination would be made or where there would be

motivation for such a combination does not provide a *prima facie* case of obviousness. Therefore, any such combination, assuming *arguendo* that any such combination is possible, would not render obvious that applicants' invention as recited in claims 1-65.

For all the reasons set forth above, the applicants believe that claims 1-65, particularly as amended, are believed to be patentable to the applicants. Reconsideration and allowance of these claims are respectfully requested.

Should the Examiner have any further concerns regarding this application, he is invited to contact Applicants' representative at the below listed number. As requested by the Examiner, enclosed herewith is a diskette containing a copy of the Response to Office Action.

A handwritten signature in black ink, appearing to read "Jill M. Breedlove", written over a horizontal line.

Jill M. Breedlove  
Attorney for Applicants  
Registration No.: 32,684

Dated: October 4, 2005.

HESLIN ROTHENBERG FARLEY & MESITI P.C.  
5 Columbia Circle  
Albany, New York 12203-5160  
Telephone: (518) 452-5600  
Facsimile: (518) 452-5579